# Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

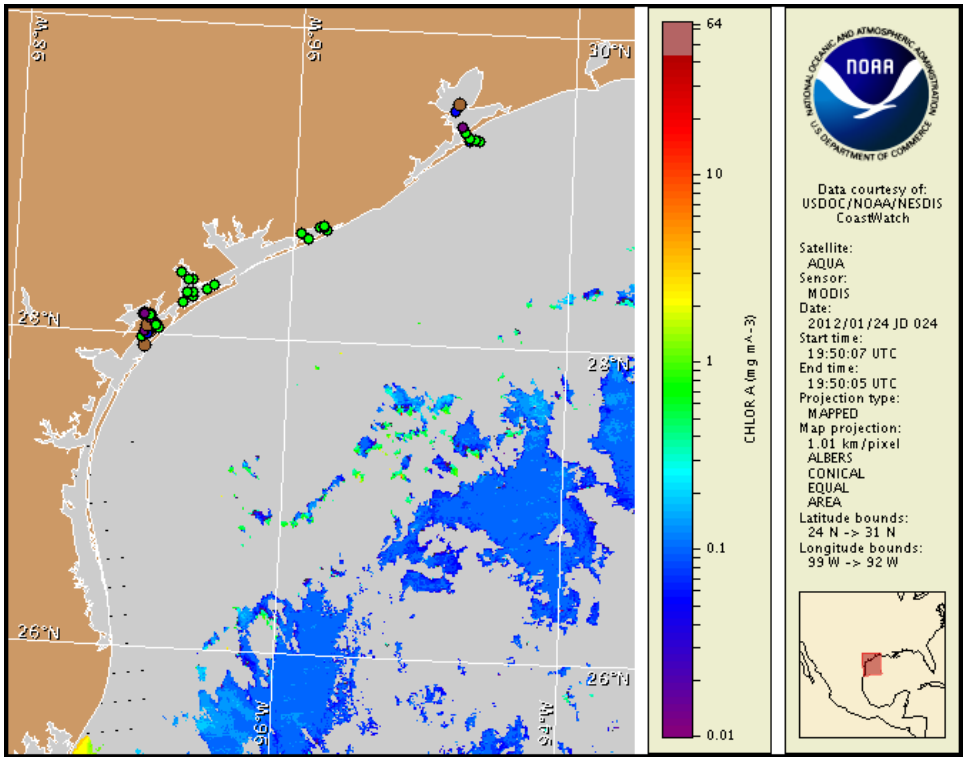
Thursday, 26 January 2012

NOAA Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 23, 2012




Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from January 17 to 25 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive: http://tidesandcurrents.noaa.gov/hab/bulletins.html

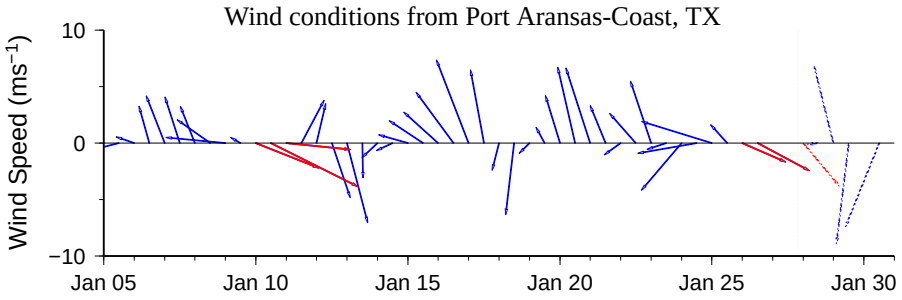
## Conditions Report

A patchy harmful algal bloom is present in the Galveston Bay and Port Aransas/Corpus Christi Bay areas. Today, patchy very low impacts are possible in the Galveston Bay and Port Aransas/Corpus Christi Bay areas. Friday through Sunday, patchy low impacts are possible in the Galveston Bay area and patchy moderate impacts are possible in the Port Aransas/Corpus Christi Bay area. No additional impacts are expected in the Matagorda Bay area, in the South Padre Island area, or elsewhere along the coast in Texas today through Sunday, January 29. The Texas Department of State Health Services (DSHS) continues to monitor blooms of the harmful algae Karenia brevis (red tide) and will open areas to harvesting when safe. Espiritu Santo Bay and the conditionally approved area of San Antonio Bay will open to commercial oyster harvesting on Friday, January 27, 2012. For the latest information on the opening and closing of oyster harvest areas, please call DSHS at 1-800-685-0361.

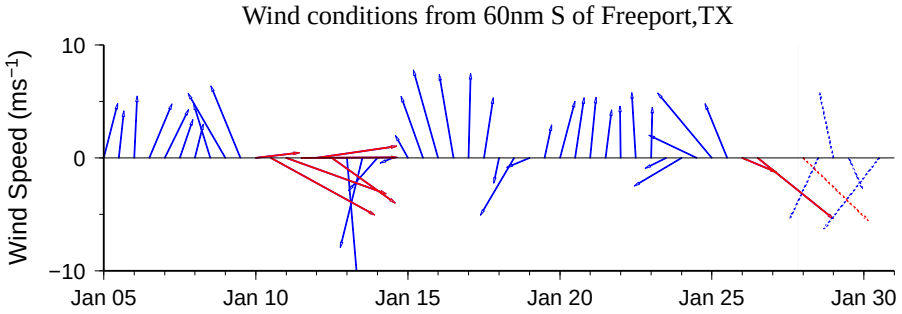
## Analysis

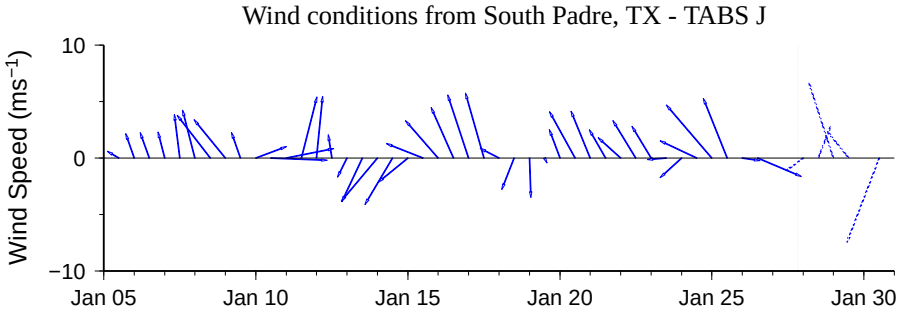
A harmful algal bloom continues in patches within Galveston Bay and the Port Aransas/Corpus Christi region, and appears to have dissipated in the South Padre Island region. In the Galveston Bay area, *K. brevis* concentrations have declined to a range between 'not present' and 'low a' (1/23; TPWD). In the Bolivar Roads Pass/Galveston Ship Channel area, samples collected indicate that *K. brevis* concentrations have decreased from previously reported 'very low a' to 'low b' concentrations to a range between 'not present' and 'very low b' (1/23; TPWD). Within Galveston Bay, 'low a' concentrations were identified from Galveston Bay Station 84, while samples collected further south from Houston Ship Channel Markers #55, 47, 35, and 25 indicate that *K. brevis* has decreased from 'low a' concentrations to a range between 'not present' and 'very low b' (1/23; TPWD). Further south, samples collected from East Matagorda Bay, Espiritu Santo Bay, and San Antonio Bay indicate that *K. brevis* is 'not present' (1/17-19; TPWD). In the Port Aransas/Corpus Christi region, *K. brevis* concentrations now range between 'not present' and 'low a' (1/23; TPWD). In Copano Bay, samples indicate that *K. brevis* concentrations have decreased from a range between 'low a' and 'low b' to a range between 'not present' and 'very low b' (1/23; TPWD). In Aransas Bay, *K. brevis* remains at 'very low b' concentrations at ARA 11 at ICCW #49 and 'not present' concentrations at RDF 12 ICWW at Cove Harbor (1/23; TPWD). *K. brevis* concentrations decreased from previously reported 'very low a' to 'medium' concentrations to: 'low a' at Fulton Harbor, 'very low a' at ARA 6 offshore Fulton and at Rockport Harbor, and 'not present' at ARA 13 at Long Reef/St. Jose Island and ARA 7 at Long Reef (1/23; TPWD). The most recent samples received from the South Padre Island and lower Laguna Madre regions indicated that *K. brevis* is 'not present' (1/11; TPWD).

Over the past few days, MODIS imagery (1/24; shown left) has been completely obscured by clouds along the Texas coastline from Sabine Pass to south of the Rio Grande area, limiting analysis. Forecast models based on predicted near-surface currents indicate a maximum bloom transport from coastal sample locations of 15km south from both the Galveston Bay and Matagorda Peninsula regions, 35km south from the Port Aransas region, and 110km south from Brazos Santiago Pass from January 24 to 28. Forecasted onshore winds will increase the potential for impacts along the Texas coast Friday through Sunday. Kavanaugh, Derner




Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



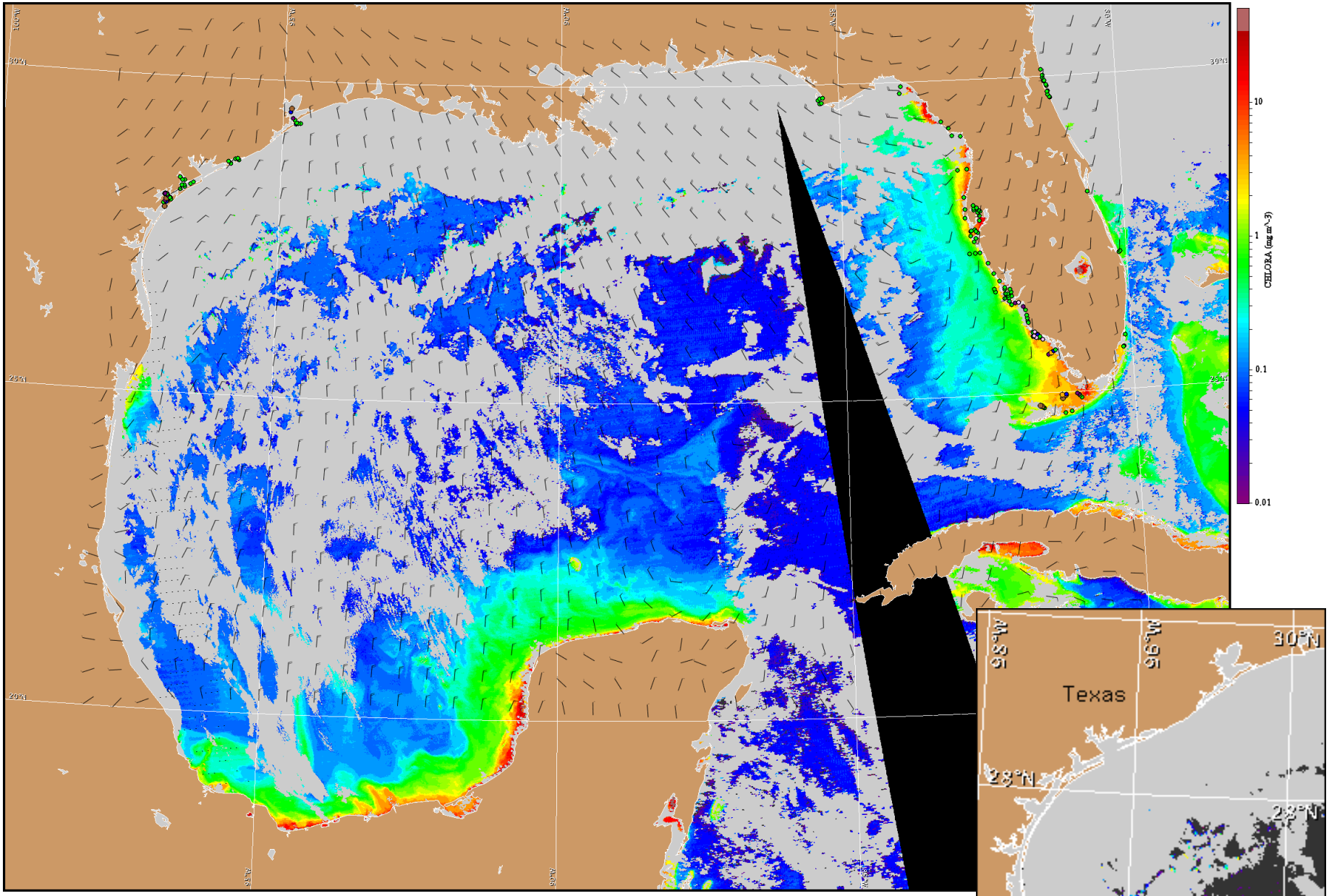




# Wind Analysis

**Galveston/Freeport**: Northwest to north winds (10-20 kn, 5-10 m/s) today switching to northeast to east winds (5-10 kn, 3-5 m/s) Friday. Southeast to east winds (5-10 kn) Friday night switching to north to northeast winds (10-15 kn) Saturday through Sunday. East winds (10 kn, 5 m/s) Sunday night.

**Port Aransas**: Northwest to north winds (10-20 kn) today. Northeast winds (5-10 kn) Friday becoming southeast to south winds (5-10 kn) in the afternoon. North to northeast winds (10-20 kn) Saturday through Sunday. East winds (10-15 kn) Sunday night.

**South Padre**: Northwest winds (10-25 kn, 5-13 m/s) today. North winds (15 kn, 8 m/s) tonight. East winds (10 kn) Friday becoming southeast to south winds (10-15 kn) in the afternoon. Northeast to east winds (15 kn) Saturday through Sunday.




Satellite chlorophyll image and forecast winds for January 27, 2012 12Z with cell concentration sampling data from January 17 to 25 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).